REMARKS

In the Official Action mailed on **March 24, 2005**, the examiner reviewed claims 25-51. Claims 25-28, 30-37, 39-46, and 48-51 were rejected under 35 U.S.C. §103(a) as being unpatentable over Zizzi (USPN 6,185,681, hereinafter "Zizzi") in view of McBride (USPN 6,292,899 B1, hereinafter "McBride"), and further in view of Sutter (USPN 5,924,094, hereinafter "Sutter"). Claims 29, 38, and 47 were rejected under 35 U.S.C. §103(a) as being unpatentable over Zizzi in view of McBride, and further in view of Sutter, and further in view of Brogliatti et al. (USPN 6,564,225 B1, hereinafter "Brogliatti").

Rejections under 35 U.S.C. § 103(a)

Independent claims 25, 34, and 43 were rejected as being unpatentable over Zizzi, in view of McBride, and further in view of Sutter.

Applicant respectfully points out that the invention of Zizzi teaches away from the present invention.

The invention of Zizzi is directed towards encrypting or decrypting documents on the **client workstation** which executes client application software. Specifically, the crypto server *"intercepts or traps I/O requests by the application which otherwise would be intercepted or trapped by the EDM client"* (see Zizzi, col. 7, lines 52-54). It will be apparent to one skilled in the art that the crypto server **must** reside on the client workstation to be able to trap I/O requests by the client application. Indeed, FIG. 3 of Zizzi clearly illustrates that crypto server 330 resides on client workstation 150.

In contrast, the present invention is specifically directed towards encrypting or decrypting data on the **database system**. In fact, the instant application explicitly states that a major drawback of encrypting data (or documents) on the client workstation is that all client workstations need to be able to encrypt and decrypt information (see page 2, lines 19-21). Specifically,

11

providing such encryption and decryption code in all of the numerous client workstations that handle sensitive data is very inefficient (see page 2, lines 21-22).

Furthermore, the invention of Zizzi requires a smart card reader to provide the encryption/decryption keys (see Zizzi, col. 8, lines 13-16, FIG. 2, 260). It will be apparent to one skilled in the art that reading data from volatile memory is substantially faster than reading data from an I/O device, such as a smart card reader. As a result, the encryption/decryption operations in the invention of Zizzi are very inefficient because they require the system to read keys from a smart card reader each time data needs to be encrypted or decrypted.

In contrast, the present invention uses an obfuscated keyfile stored in volatile memory of a server associated with the database system (see page 4, lines 7-9). It will be apparent to one skilled in the art that storing an obfuscated keyfile in volatile memory substantially speeds up the encryption and decryption operations. Moreover, note that, since the keyfile is obfuscated, it prevents a malicious DBA from decrypting user data.

Furthermore, note that enabling a database system to support transparent encryption while protecting user data from database administrators is not obvious. This is because it involves storing an obfuscated keyfile in volatile memory and it involves the complex operations shown in FIG. 3.

Accordingly, Applicant has amended independent claims 25, 34, and 43 to clarify that the present invention uses an obfuscated keyfile located within the volatile memory of a server of the database system to manage encryption keys, thereby preventing a DBA from accessing user data. These amendments find support on page 4, lines 7-9, FIGs. 1 and 2, index 116 of the instant application.
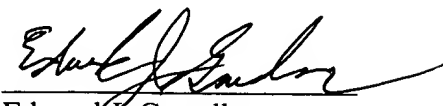
Hence, Applicant respectfully submits that independent claims 25, 34, and 43 as presently amended are in condition for allowance. Applicant also submits that claims 26-33, which depend upon claim 25, claims 35-42, which depend upon claim 34, and claims 44-51, which depend upon claim 43, are for the

same reasons in condition for allowance and for reasons of the unique combinations recited in such claims.

CONCLUSION

It is submitted that the present application is presently in form for allowance. Such action is respectfully requested.

Respectfully submitted,

By   _(signature)_

Edward J. Grundler
Registration No. 47,615

Date: 3 June 2005

Edward J. Grundler
PARK, VAUGHAN & FLEMING LLP
2820 Fifth Street
Davis, CA 95616
Tel: (530) 759-1663
FAX: (530) 759-1665